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OUTCOMES OF OUT OF HOSPITAL CARDIAC ARREST IN PATIENTS UNDERGOING THERAPEUTIC HYPOTHERMIA

Poster Contributions
Hall C
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Background: Out of hospital cardiac arrest is major cause of morbidity and mortality in US. Survival rates are dismal 9.5% and also major financial burden for health care. Hypothermia protocol has shown improved neurological outcomes after sudden cardiac arrest, but the factors affecting outcomes remain unclear.

Methods: This is retrospective chart review study done among patients admitted with diagnosis of cardiac arrest. We identified 60 patients admitted to CCU from January 2012 to September 2014 with out of out of hospital cardiac arrest and underwent therapeutic hypothermia. Various risk factors affecting survival outcomes were analyzed.

Results: The mean age of patients was 66 ±10 years with 36(60%) men and 24 (40%) women. 32 (54%) patients had primarily documented vtach/vfib arrest, 12 (20%) with asystole and 16(26%) with PEA arrest. Overall 23 (38%) patients and the average hospital stay for patients survived was 10 ±6 days. Patients with unwitnessed cardiac arrest had worse outcomes compared to those who did not (32% vs 15%, p value < 0.001). Patients with vtach/vifb arrest had better survival outcomes compared to other types of arrest. (30% vs 15%, p value < 0.005. Patients with prior history of documented coronary artery disease had worst survival compared to those with no history of CAD (24% vs 16%, p value <0.001) and similarly also with diabetes (30% vs. 13%, p value < 0.001). EEG is helpful but was not significant predicting neurological outcomes as 4 of 23 survived patients had poor prognosis based on EEG but had meaningful neurological recovery.

Conclusions: In patients with out of hospital cardiac arrest undergoing therapeutic hypothermia, overall there were better survival outcomes then reported. However, patients with unwitnessed cardiac arrest had worse survival outcomes. Patients with ventricular tachycardia/fibrillation arrest had better outcomes compared to other type of arrest. Patients with diabetes mellitus and prior history of CAD with cardiac arrest had worse outcomes compared to those who did not. EEG was helpful in predicting neurological outcomes but not significant in predicting overall recovery.